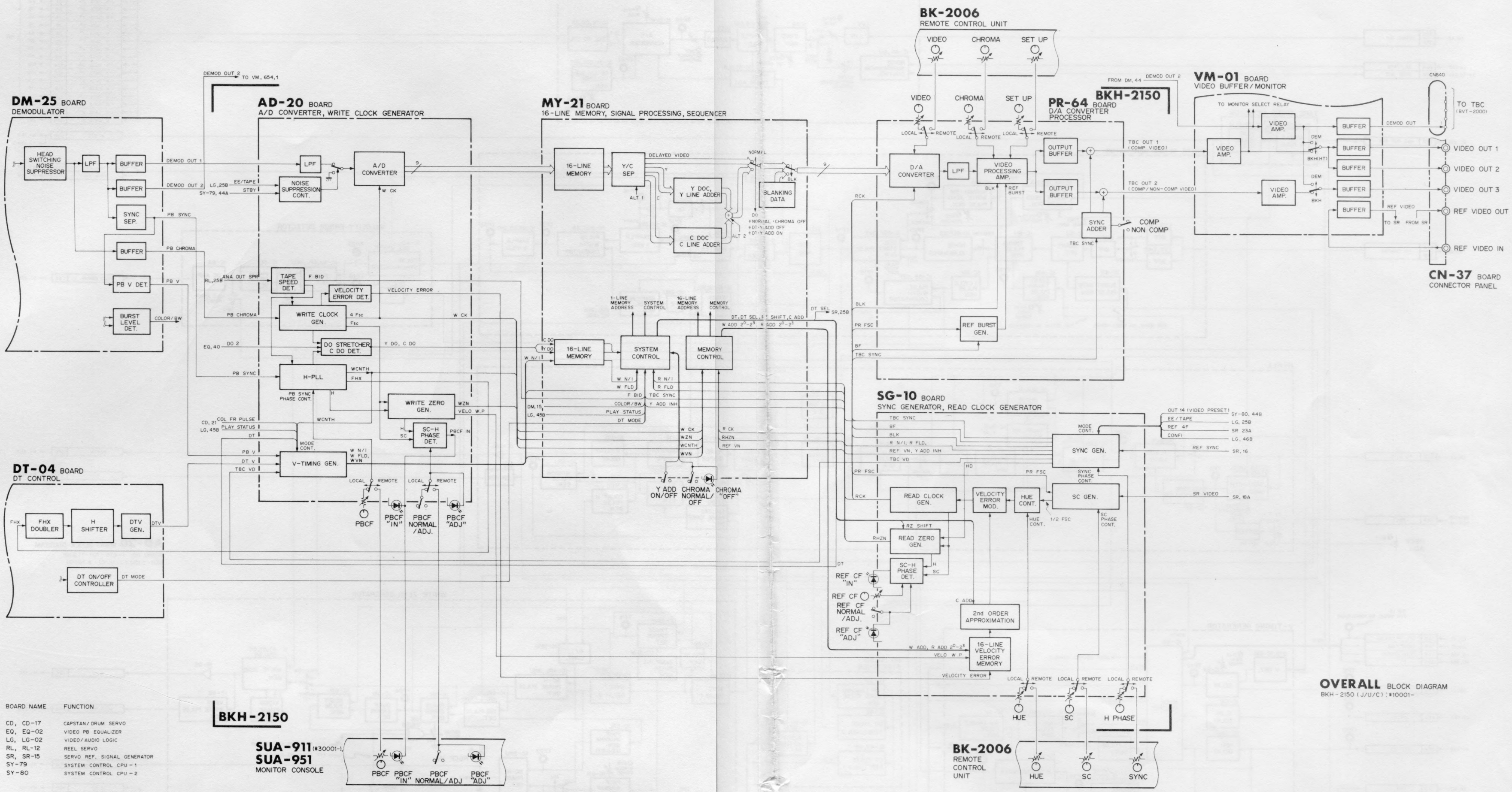
SECTION A
BLOCK DIAGRAMS

OVERALL BLOCK DIAGRAM

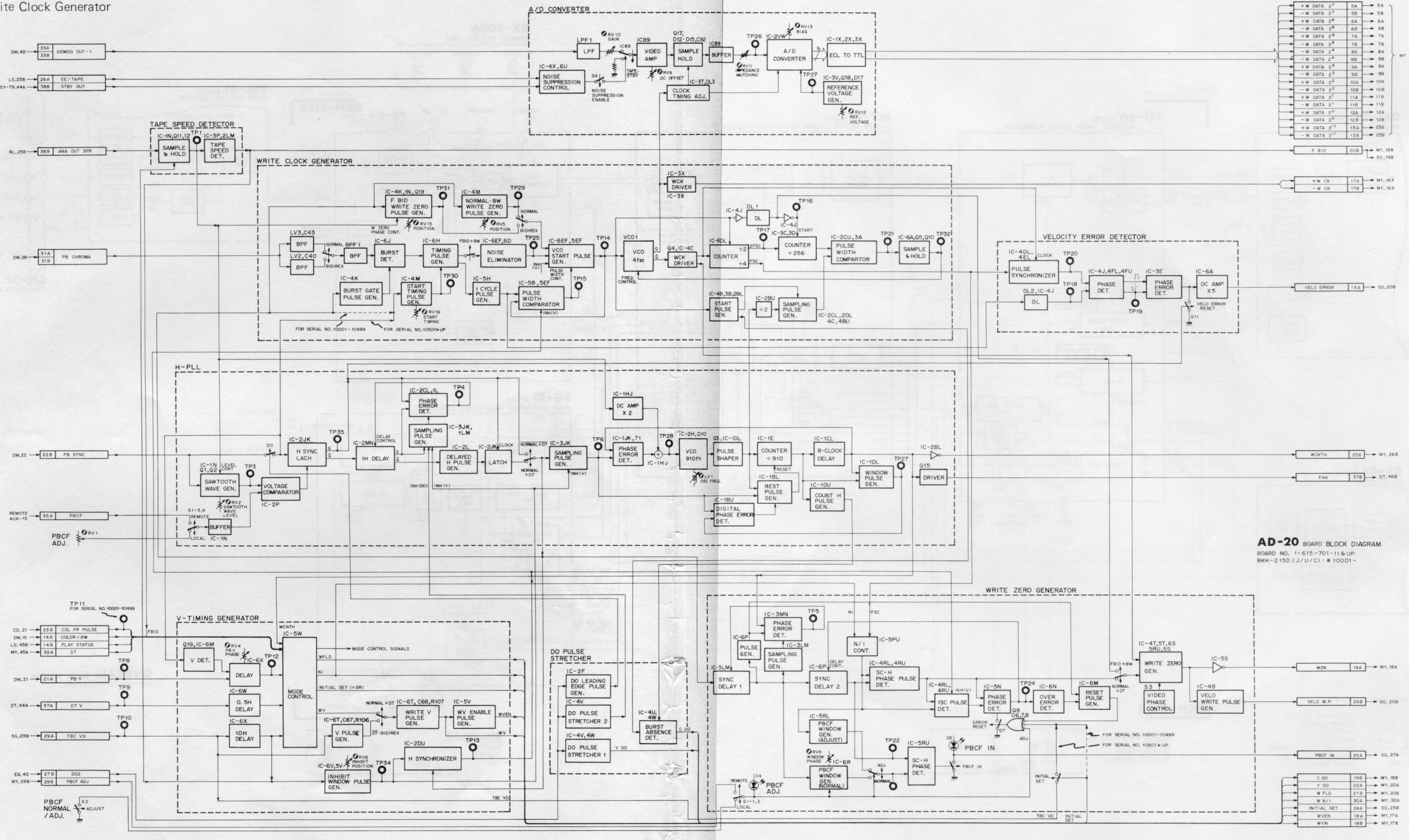


BOARD NAME	FUNCTION
CD, CD-17	CAPSTAN/DRUM SERVO
EQ, EQ-02	VIDEO PB EQUALIZER
LG, LG-02	VIDEO/AUDIO LOGIC
RL, RL-12	REEL SERVO
SR, SR-15	SERVO REF. SIGNAL GENERATOR
SY-79	SYSTEM CONTROL CPU-1
SY-80	SYSTEM CONTROL CPU-2

OVERALL BLOCK DIAGRAM
BKH-2150 (J/U/C) : #10001-

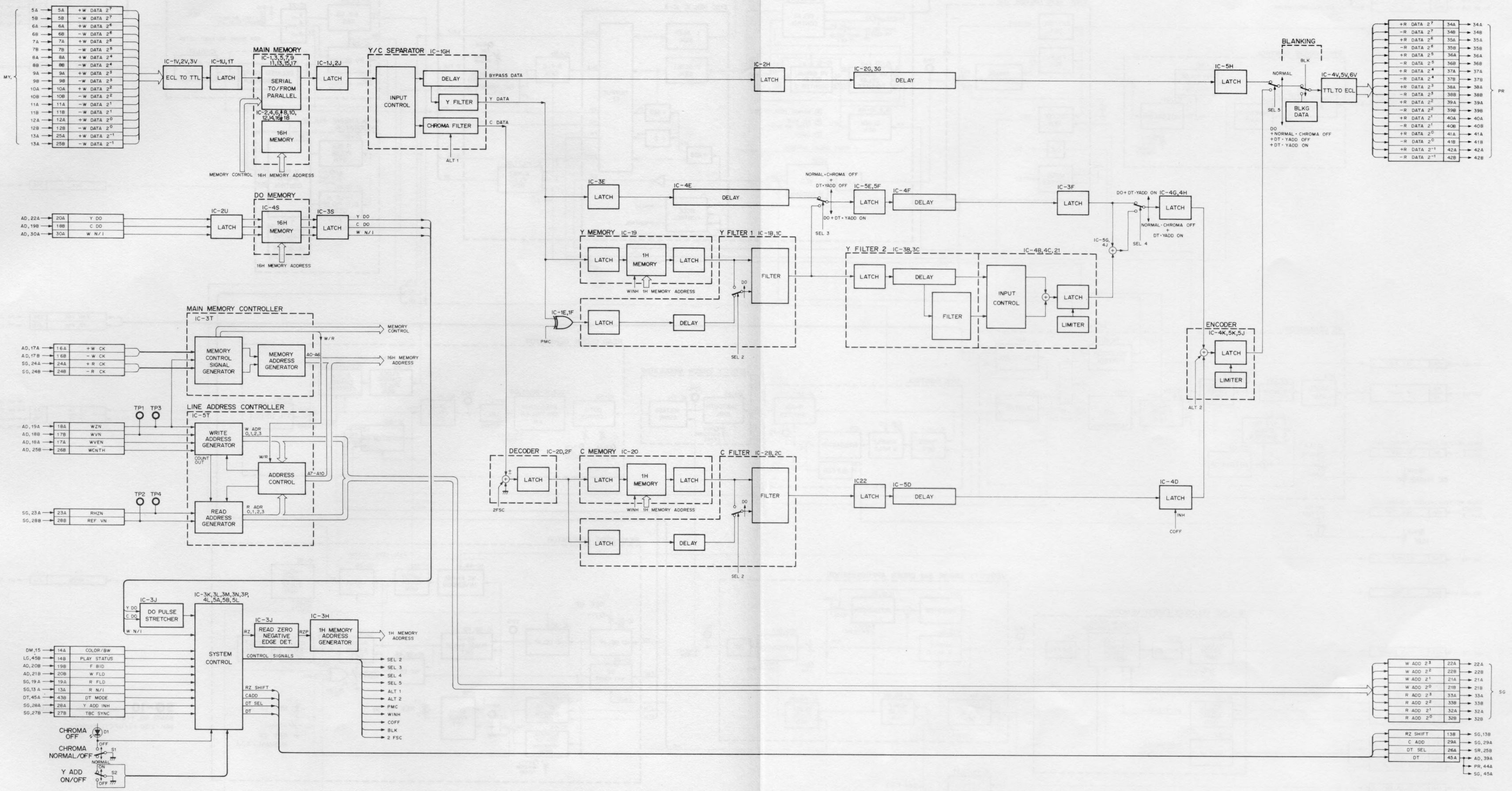
AD-20 BOARD

A/D Converter
Write Clock Generator



MY-21 BOARD

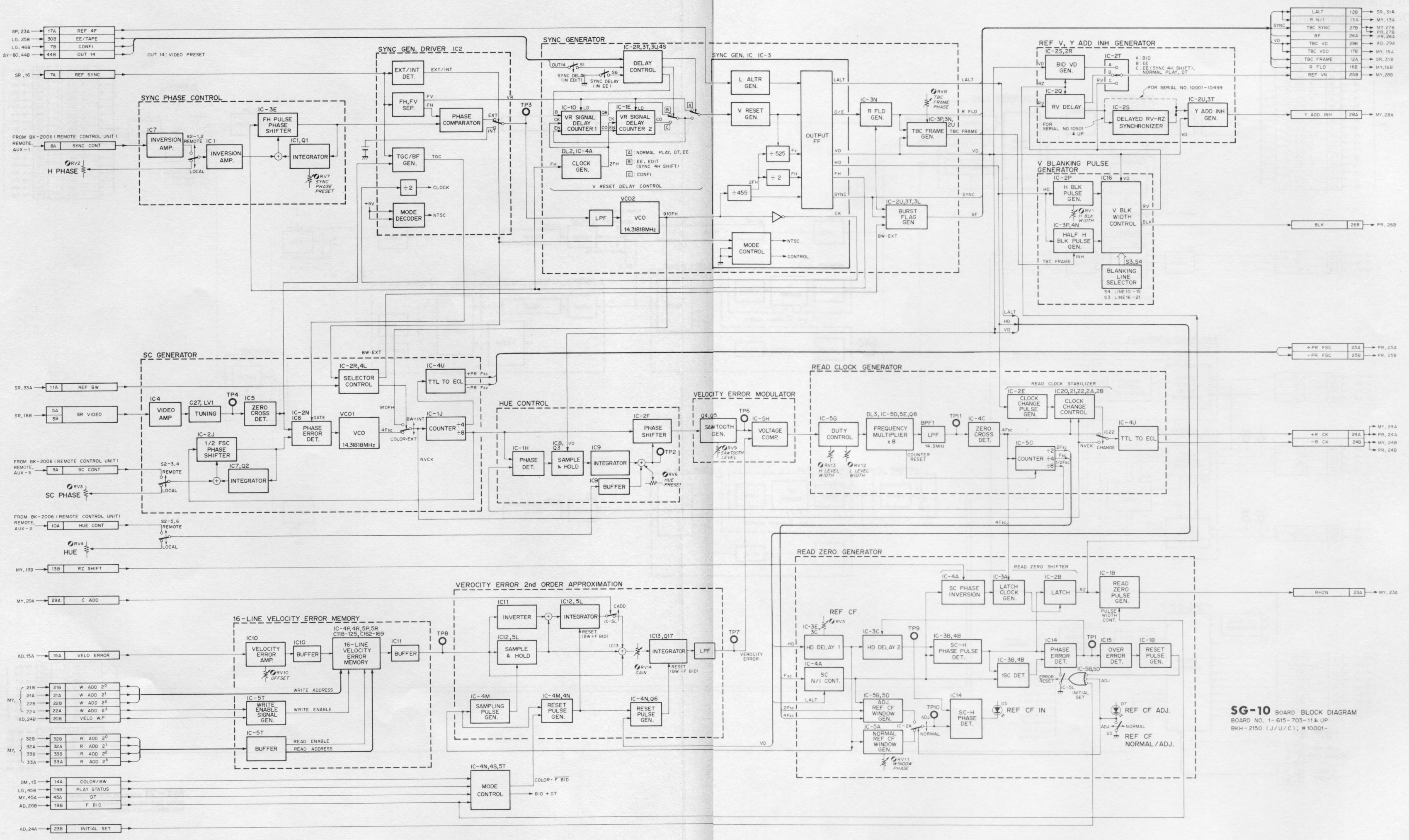
16-Line Memory
Dropout Compensator
Sequencer



MY-21 BOARD BLOCK DIAGRAM
BOARD NO. 1-615-702-11 & UP
BKH-2150(J/U/C) #10001~

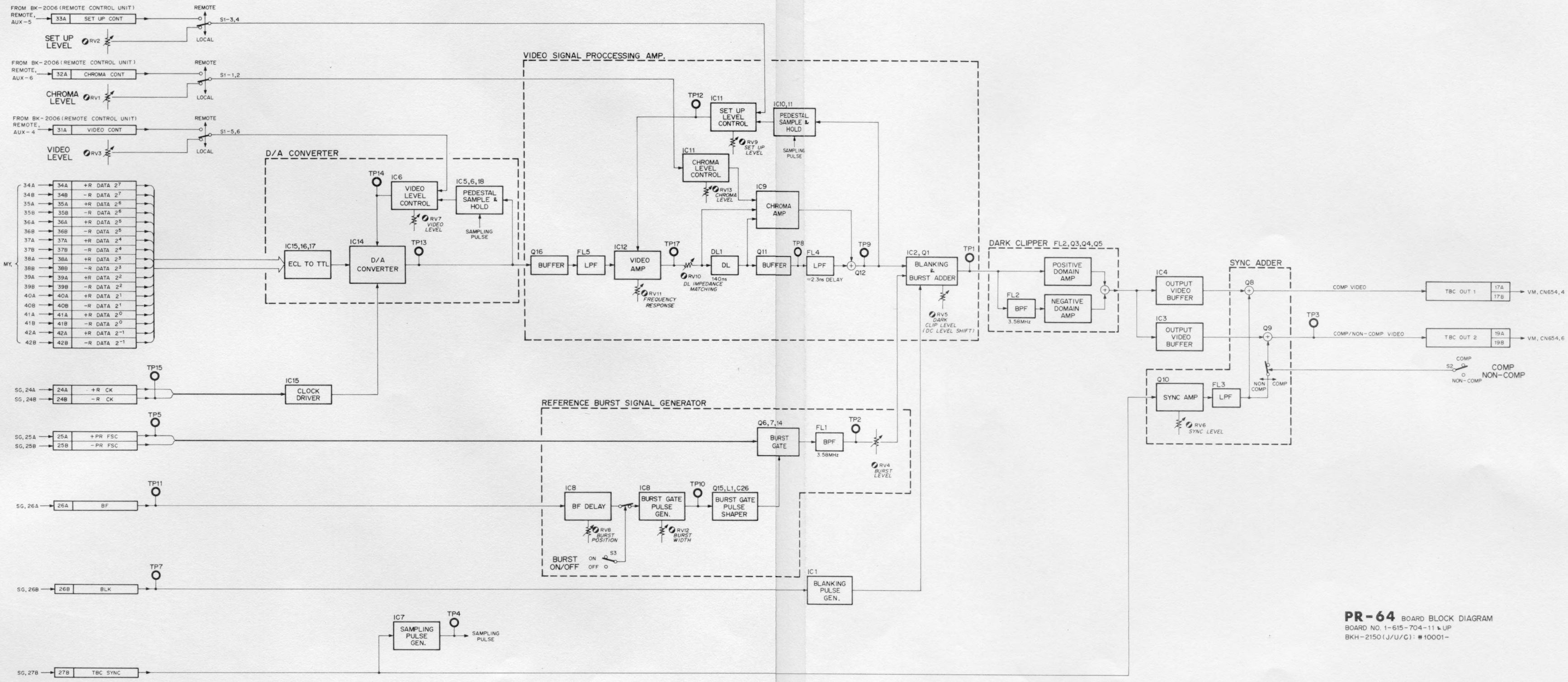
SG-10 BOARD

Sync Generator
Read Clock Generator



SG-10 BOARD BLOCK DIAGRAM
BOARD NO. 1-615-703-11 & UP
BKH-2150 (J/U/C); #10001-

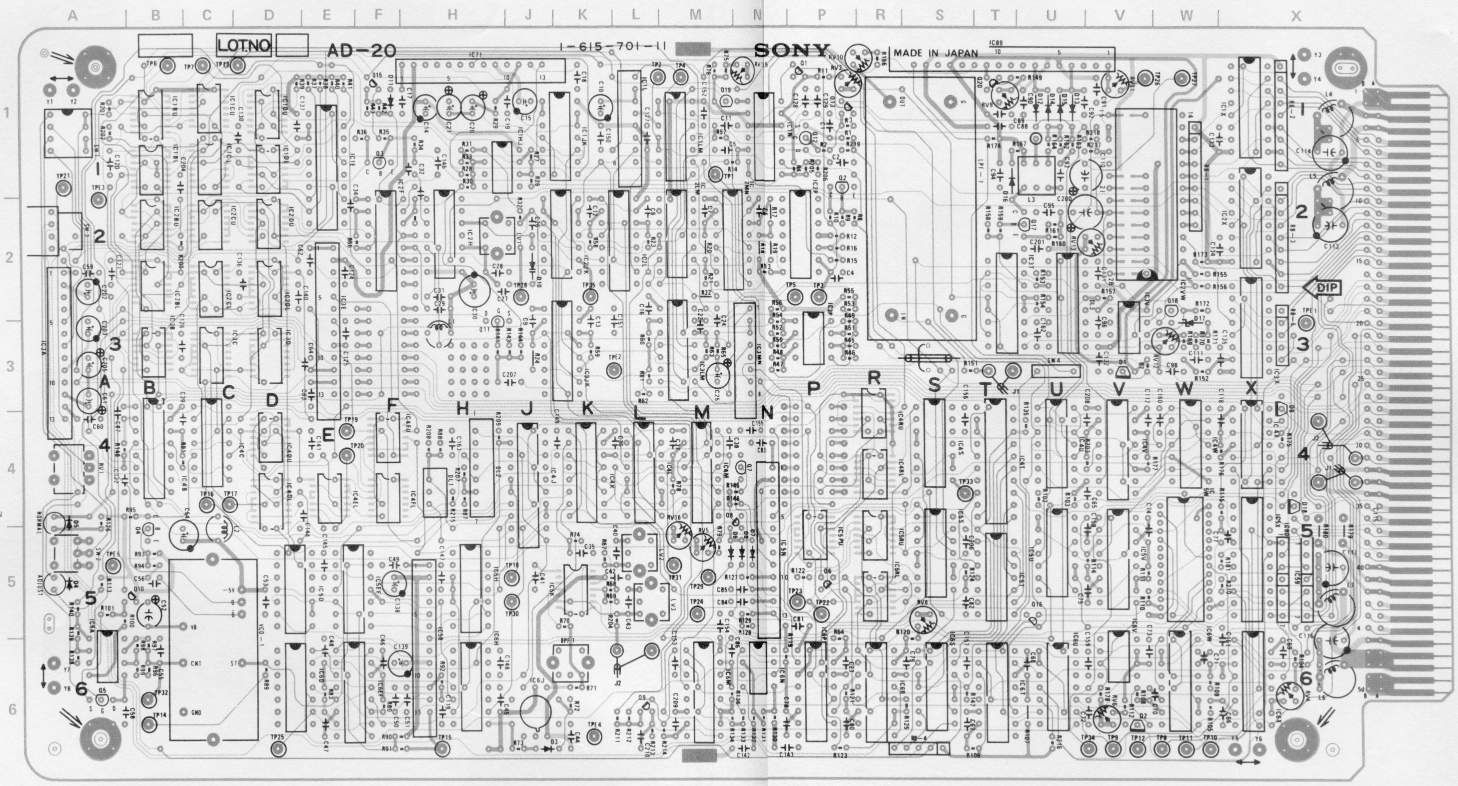
PR-64 BOARD
D/A Converter
Processor

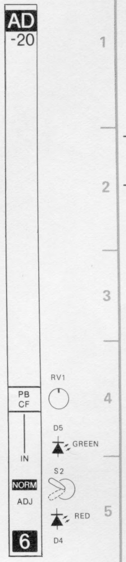


PR-64 BOARD BLOCK DIAGRAM
BOARD NO. 1-615-704-11 & UP
BKH-2150(J/U/C): #10001-

AD-20 BOARD (1-615-701-11)

Component Side

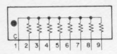




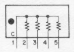
■ 1-615-701-11 COMPONENT SIDE

■ 1-615-701-11 SOLDER SIDE

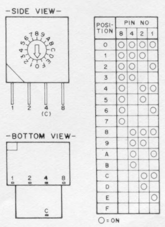
RB1, 2, 3

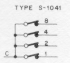


RB4, 5



S3





AD-20 (1-615-701-11)

BKH-2150(J,U/C)

BPF1 6K

D1 3V
D2 6V
D3 6J
D4 5A
D5 4A
D6 5N
D7 5N
D8 5N
D9 3X
D10 2J
D11 1F
D12 1U
D13 1U
D14 1U
D15 1U
D16 1T
D17 3W
D18 4X

DL1 4H
DL2 4H
DL3 3U

IC58 6H
IC59 5X
IC60 5X
IC71 1H
IC89 1T

IC1BL
IC1BU
IC1CL
IC1CU
IC1DL
IC1DU
IC1E
IC1HJ
IC1JK
IC1L
IC1LM
IC1N
IC1X
IC2BL
IC2BU
IC2CL
IC2CU
IC2DL
IC2DU
IC2F
IC2H
IC2JK
IC2L
IC2LM
IC2MN
IC2P
IC2VW
IC3A
IC3B
IC3C
IC3D
IC3E
IC3JK
IC3LM
IC3MN
IC3P
IC3T
IC3V
IC3X
IC4B
IC4C
IC4DL
IC4DU
IC4EL
IC4FL
IC4FU
IC4J
IC4K
IC4L
IC4M
IC4RL
IC4RU
IC4S
IC4T
IC4U
IC4V
IC4W
IC4X
IC5D
IC5EF
IC5H
IC5K
IC5N
IC5PU
IC5RL
IC5RU
IC5S
IC5T
IC5U
IC5V
IC5W
IC5X
IC6A
IC6D
IC6EF
IC6F
IC6H
IC6J
IC6M
IC6N
IC6P
IC6R
IC6S
IC6T
IC6U
IC6V
IC6W
IC6X

LPF 1S

LV1 2H
LV2 5L
LV3 5L

Q1 1P
Q2 1P
Q3 1F
Q4 4B
Q5 6A
Q6 5P
Q7 4N
Q8 4N
Q9 6L
Q10 5B
Q11 3H
Q12 1P
Q13 1P
Q15 1F
Q16 5U
Q17 2U
Q18 3W
Q19 1M
Q20 1T

RB1 1W
RB2 1X
RB3 2X
RB4 6S
RB5 3X

RV1 4A
RV2 1P
RV4 6X
RV5 5M
RV6 6V
RV8 5S
RV9 1T
RV10 1P
RV11 1V
RV12 3W
RV13 2V
RV15 1N
RV16 5M

S1 1A
S2 5A
S3 2A
S4 3U

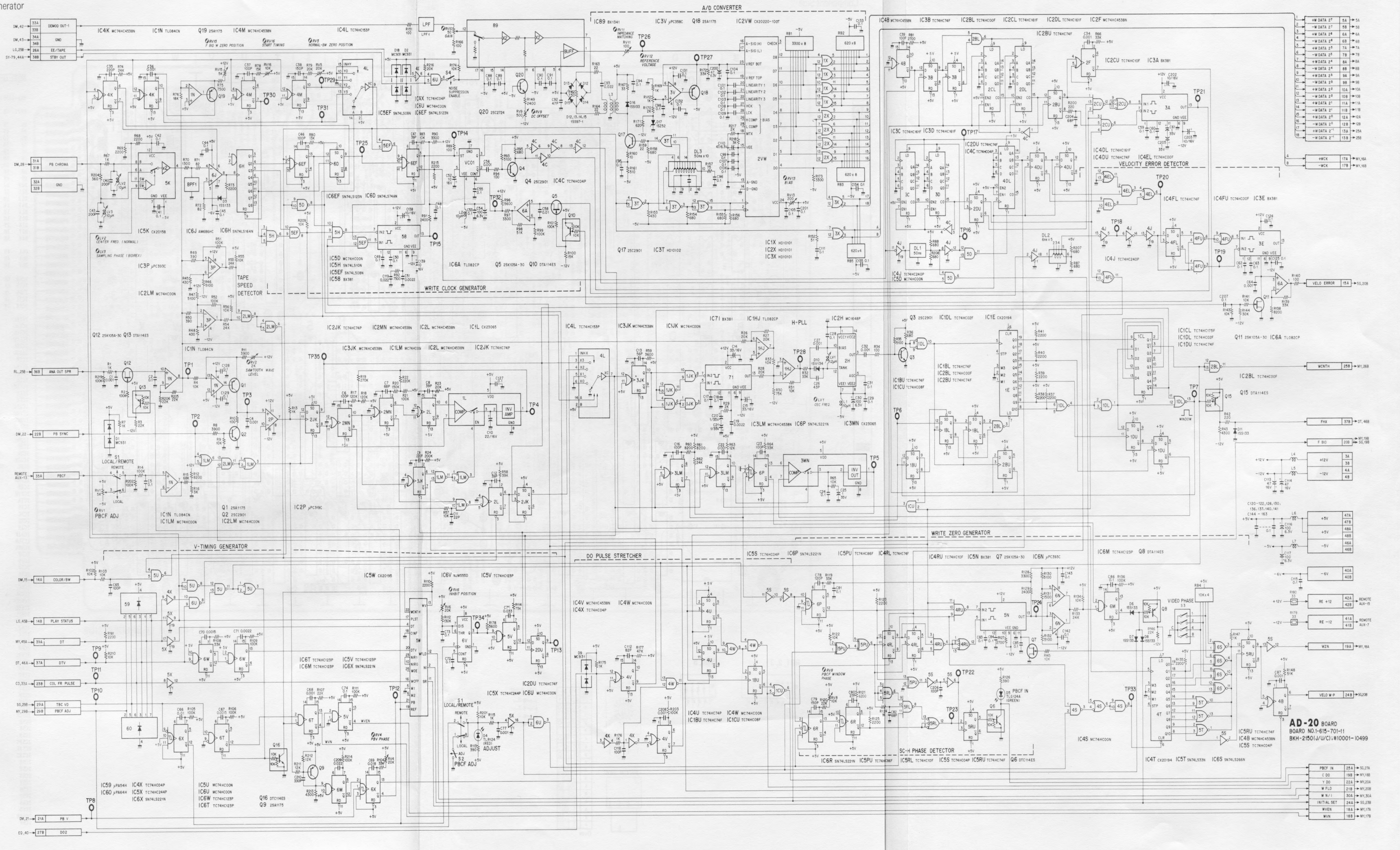
TP1 1M
TP2 1L
TP3 2P
TP4 1M
TP5 2P
TP6 1B
TP7 1C
TP8 6W
TP9 6V
TP10 6W
TP11 6W
TP12 6V
TP13 1D
TP14 6B
TP15 6H
TP16 4C
TP17 4C
TP18 5J
TP19 4E
TP20 4E
TP21 1A
TP22 5P
TP23 5P
TP24 5M
TP25 6D
TP26 1V
TP27 1W
TP28 2J
TP29 5M
TP30 5J
TP31 5M
TP32 6B
TP33 4S
TP34 6U
TP35 2K

TPE1 3X
TPE2 3L
TPE3 2A
TPE4 6K
TPE5 5A

VCO1 5C

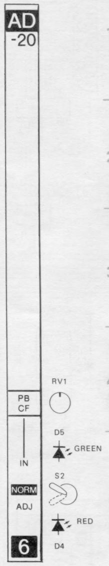
AD-20 BOARD

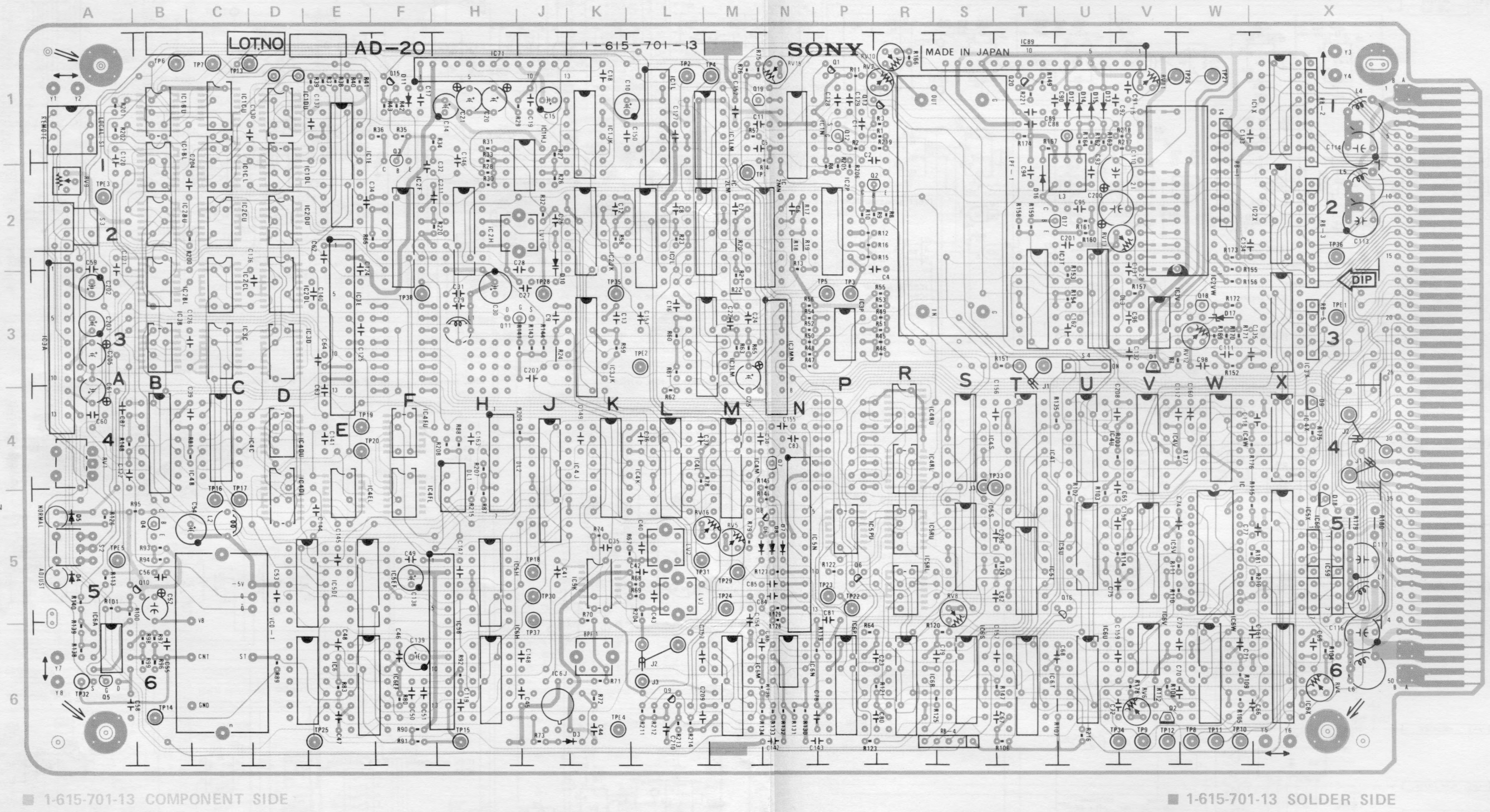
A/D Converter
Write Clock Generator



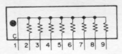
AD-20 BOARD (1-615-701-13)

Component Side

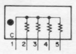




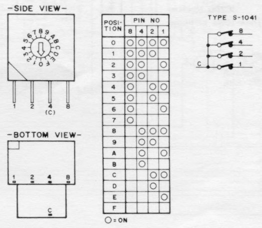
RB1, 2, 3



RB4, 5



S3



AD-20 (1-615-701-12 & UP)

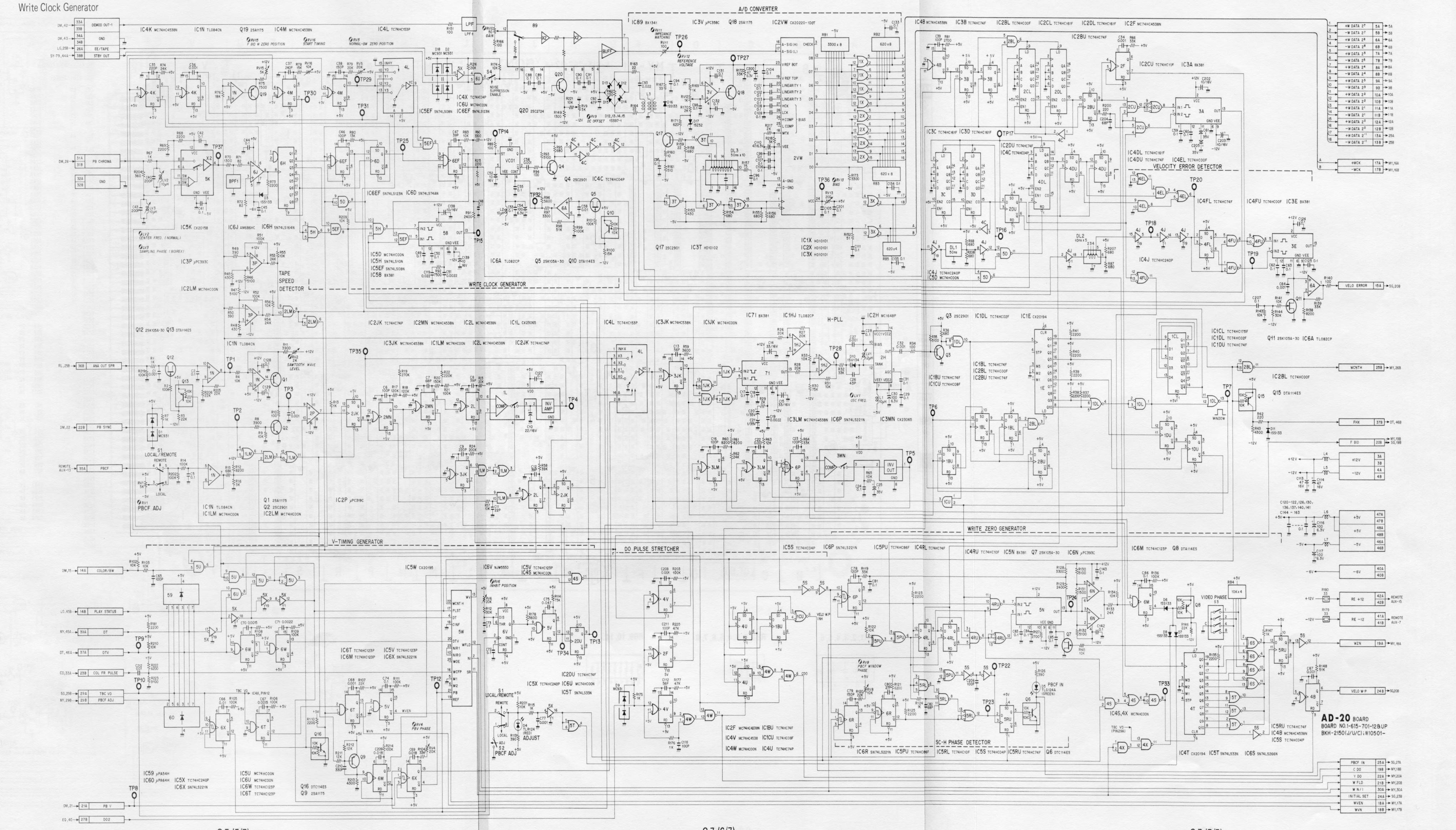
BKH-2150(J,U/C)

BPF1	6K
D1	3V
D2	6V
D3	6J
D4	5A
D5	5A
D6	5N
D7	5N
D8	5N
D9	4X
D10	2J
D11	1F
D12	1U
D13	1U
D14	1U
D15	1U
D16	2T
D17	3W
D18	5X
DL1	4H
DL2	4H
DL3	3U
IC58	6H
IC59	5X
IC60	5X
IC71	1H
IC89	1T
IC1BL	
IC1BU	
IC1CL	
IC1CU	
IC1DL	
IC1DU	
IC1E	
IC1HJ	
IC1JK	
IC1L	
IC1LM	
IC1N	
IC1X	
IC2BL	
IC2BU	
IC2CL	
IC2CU	
IC2DL	
IC2DU	
IC2F	
IC2H	
IC2JK	
IC2L	
IC2LM	
IC2MN	
IC2P	
IC2VW	
IC3A	
IC3B	
IC3C	
IC3D	
IC3E	
IC3JK	
IC3LM	
IC3MN	
IC3P	
IC3T	
IC3V	
IC3X	
IC4B	
IC4C	
IC4DL	
IC4DU	
IC4EL	
IC4FL	
IC4FU	
IC4J	
IC4K	
IC4L	
IC4M	
IC4RL	
IC4RU	
IC4S	
IC4T	
IC4U	
IC4V	
IC4W	
IC4X	
IC5D	
IC5EF	
IC5H	
IC5K	
IC5N	
IC5PU	
IC5RL	
IC5RU	
IC5S	
IC5T	
IC5U	
IC5V	
IC5W	
IC5X	
IC6A	
IC6D	
IC6EF	
IC6F	

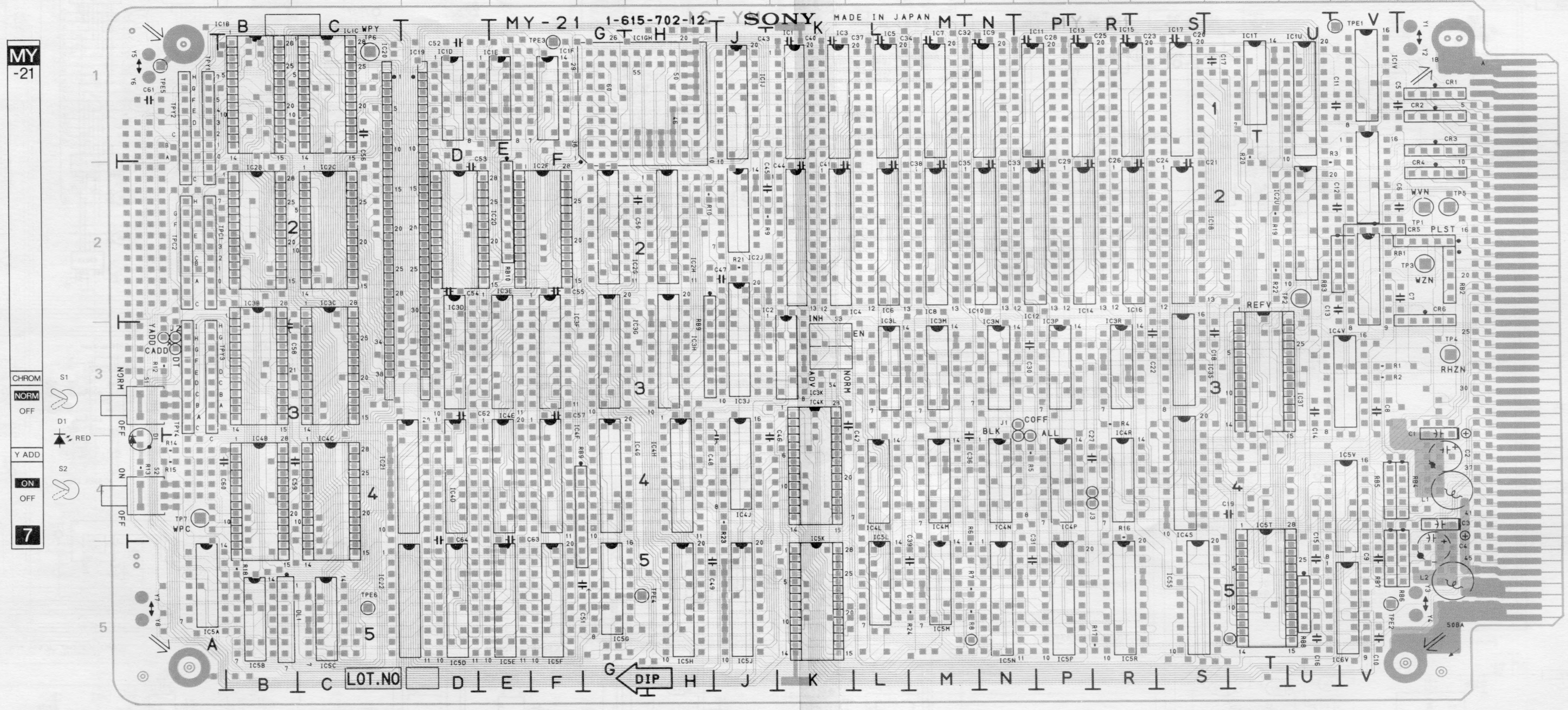
IC6H	
IC6J	
IC6M	
IC6N	
IC6P	
IC6R	
IC6S	
IC6T	
IC6U	
IC6V	
IC6W	
IC6X	
LPF	1S
LV1	2H
LV2	5L
LV3	5L
Q1	1P
Q2	2P
Q3	1F
Q4	5B
Q5	6A
Q6	5P
Q7	4N
Q8	5N
Q9	6L
Q10	5B
Q11	3H
Q12	1P
Q13	1P
Q15	1F
Q16	5U
Q17	2U
Q18	3W
Q19	1M
Q20	1T
RB1	1W
RB2	1X
RB3	2X
RB4	6S
RB5	3X
RV1	4A
RV2	1P
RV4	6X
RV5	5M
RV6	6V
RV8	5S
RV9	1T
RV10	1P
RV11	1V
RV12	3W
RV13	2V
RV15	1N
RV16	5M
S1	1A
S2	5A
S3	2A
S4	3U
TP1	2M
TP2	1L
TP3	3P
TP4	1M
TP5	3P
TP6	1B
TP7	1C
TP8	6W
TP9	6V
TP10	6W
TP12	6V
TP13	1D
TP14	6B
TP15	6H
TP16	5C
TP17	5C
TP18	5J
TP19	4E
TP20	4E
TP22	5P
TP23	5P
TP24	5M
TP25	6E
TP26	1V
TP27	1W
TP28	3J
TP29	5M
TP30	5J
TP31	5M
TP32	6B
TP33	4S
TP34	6U
TP35	2K
TP36	2X
TP37	5J
TPE1	3X
TPE2	3L
TPE3	2A
TPE4	6K
TPE5	5A
VCO1	5C

AD-20 BOARD

A/D Converter
Write Clock Generator



MY-21 BOARD (1-615-702-12)
Component Side



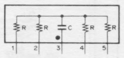
MY-21 (1-615-702-12

BKH-2150(J,U/C)

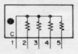
CR1	1V
CR2	1V
CR3	1V
CR4	2V
CR5	2V
CR6	3V
D1	4A
DL1	5B
IC1	1K
IC2	3K
IC3	1K
IC4	2K
IC5	1L
IC6	2L
IC7	1M
IC8	2M
IC9	1N
IC10	2N
IC11	1P
IC12	2P
IC13	1P
IC14	2P
IC15	1R
IC16	2R
IC17	1S
IC18	2S
IC19	2D
IC20	2C
IC21	4D
IC22	5D
IC1B	
IC1C	
IC1D	
IC1E	
IC1F	
IC1GH	
IC1J	
IC1T	
IC1U	
IC1V	
IC2B	
IC2C	
IC2D	
IC2F	
IC2G	
IC2H	
IC2J	
IC2U	
IC2V	
IC3B	
IC3C	
IC3D	
IC3E	
IC3F	
IC3G	
IC3H	
IC3J	
IC3K	
IC3L	
IC3M	
IC3N	
IC3P	
IC3R	
IC3S	
IC3T	
IC3V	

IC4B	
IC4C	
IC4D	
IC4E	
IC4F	
IC4G	
IC4H	
IC4J	
IC4K	
IC4L	
IC4M	
IC4N	
IC4P	
IC4R	
IC4S	
IC4V	
IC5A	
IC5B	
IC5C	
IC5D	
IC5E	
IC5F	
IC5G	
IC5H	
IC5J	
IC5K	
IC5L	
IC5M	
IC5N	
IC5P	
IC5R	
IC5S	
IC5T	
IC5V	
IC6V	
RB1	2V
RB2	2V
RB3	2V
RB4	4V
RB5	4V
RB6	5V
RB7	5V
RB8	5U
RB9	4G
RB10	2E
RB11	3H
S1	3A
S2	4A
S3	3K
TP1	2V
TP2	2U
TP3	2V
TP4	3V
TP5	2V
TP6	1C
TP7	4A
TPE1	1V
TPE2	5V
TPE3	1F
TPE4	5G
TPE5	1A
TPE6	5C

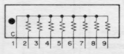
CR1, 2, 3, 4, 5, 6

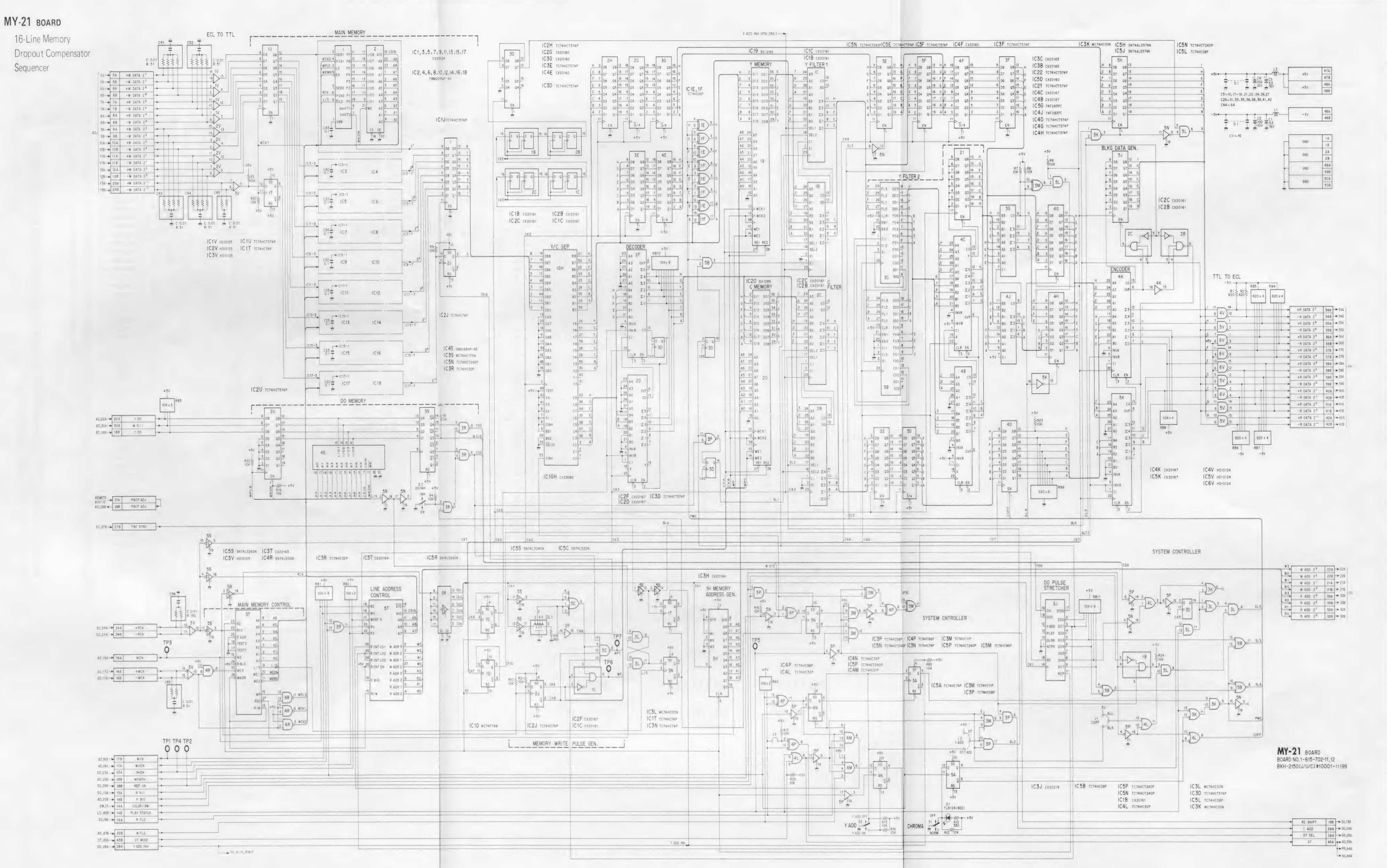


RB1, 2, 3, 4, 5, 6, 7, 8



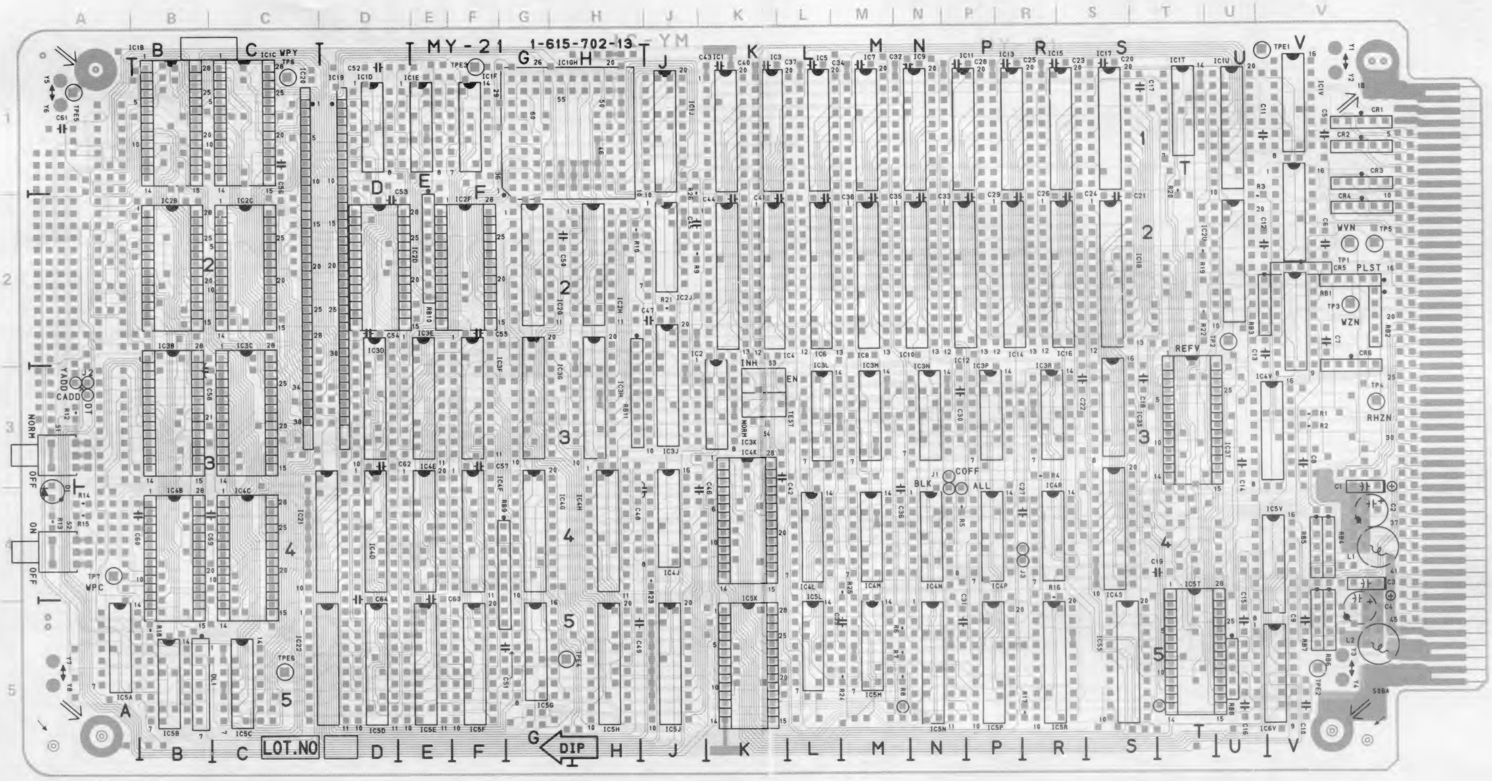
RB9, 10, 11




MY-21 BOARD
16-Line Memory
Dropout Compensator
Sequencer
ECL TO TTL
MAIN MEMORY
DO MEMORY
MAIN MEMORY CONTROL
LINE ADDRESS CONTROL
MEMORY WRITE PULSE GEN.
1H MEMORY ADDRESS GEN.
Y/C SEP
DECODER
Y MEMORY
Y FILTER 1
Y FILTER 2
C MEMORY
C FILTER
BLKG DATA GEN.
ENCODER
TTL TO ECL
SYSTEM CONTROLLER
DO PULSE STRETCHER
CHROMA
Y ADD
TP1 TP4 TP2
TP3
TP5
TP6
TP7
MY-21 BOARD
BOARD NO.1-615-702-11,12
BKH-2150(J/U/C) #10001-11199

MY-21 BOARD (1-615-702-13)

Component Side



■ 1-615-702-13 COMPONENT SIDE

■ 1-615-702-13 SOLDER SIDE

MY-21 (1-615-702-13 & UP)

BKH-2150(J,U/C)

CR1	1V
CR2	1V
CR3	1V
CR4	2V
CR5	2V
CR6	3V
D1	4A
DL1	5B
IC1	1K
IC2	3K
IC3	1K
IC4	2K
IC5	1L
IC6	2L
IC7	1M
IC8	2M
IC9	1N
IC10	2N
IC11	1P
IC12	2P
IC13	1P
IC14	2P
IC15	1R
IC16	2R
IC17	1S
IC18	2S
IC19	2D
IC20	2C
IC21	4D
IC22	5D
IC1B	
IC1C	
IC1D	
IC1E	
IC1F	
IC1GH	
IC1J	
IC1T	
IC1U	
IC1V	
IC2B	
IC2C	
IC2D	
IC2F	
IC2G	
IC2H	
IC2J	
IC2U	
IC2V	
IC3B	
IC3C	
IC3D	
IC3E	
IC3F	
IC3G	
IC3H	
IC3J	
IC3K	
IC3L	
IC3M	
IC3N	
IC3P	
IC3R	
IC3S	
IC3T	
IC3V	

IC4B	
IC4C	
IC4D	
IC4E	
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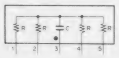
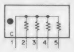
IC4R	
IC4S	
IC4V	
IC5A	
IC5B	
IC5C	
IC5D	
IC5E	
IC5F	
IC5G	
IC5H	
IC5J	
IC5K	
IC5L	
IC5M	
IC5N	
IC5P	
IC5R	
IC5S	
IC5T	
IC5V	
IC6V	
RB1	2V
RB2	2V
RB3	2V
RB4	4V
RB5	4V
RB6	5V
RB7	5V
RB8	5U
RB9	4G
RB10	2E
RB11	3H
S1	3A
S2	4A
S3	3K
S4	3K
TP1	2V
TP2	2U
TP3	2V
TP4	3V
TP5	2V
TP6	1C
TP7	4A
TPE1	1V
TPE2	5V
TPE3	1F
TPE4	5G
TPE5	1A
TPE6	5C

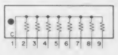
CR1, 2, 3, 4, 5, 6

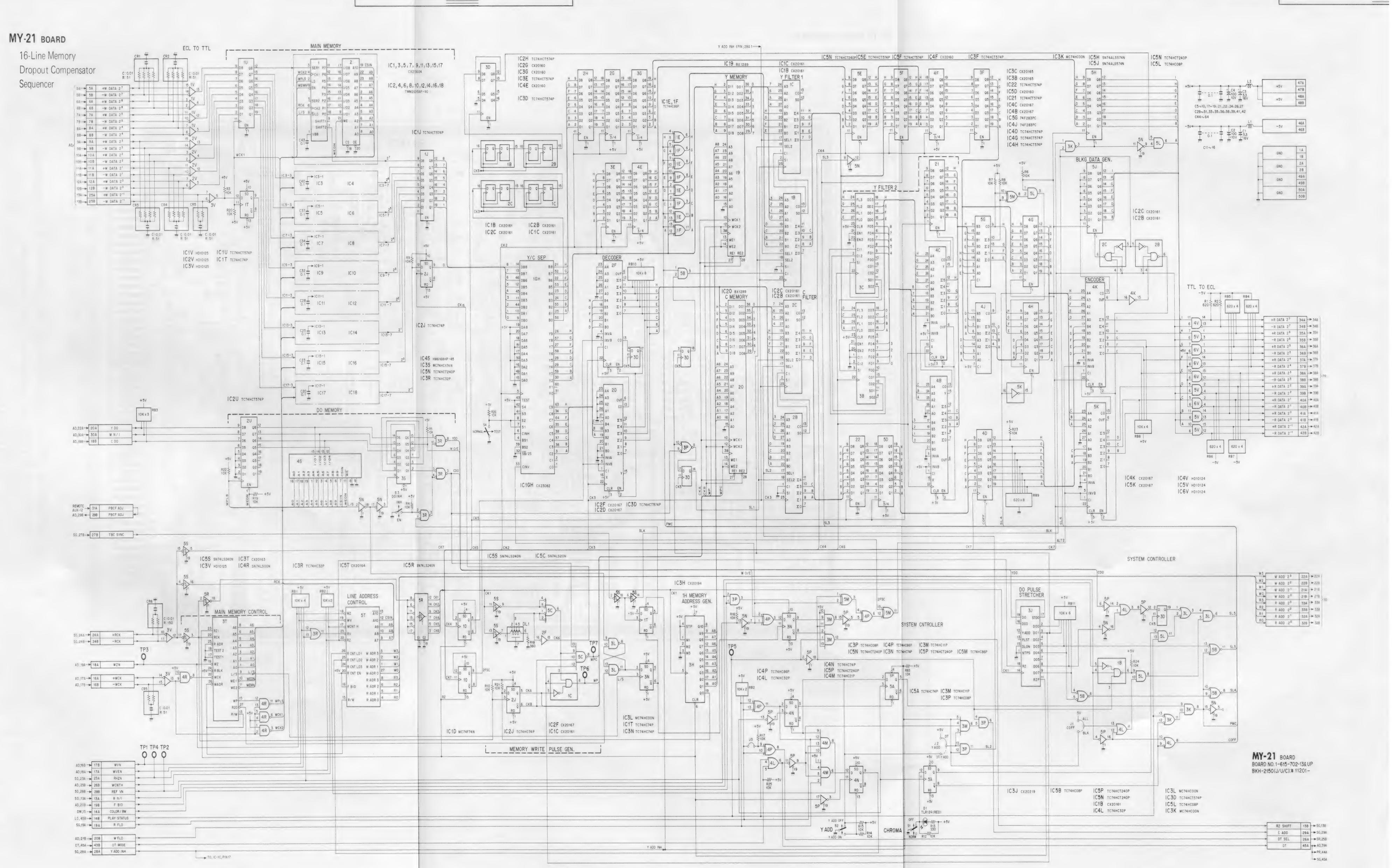


RB1, 2, 3, 4, 5, 6, 7, 8



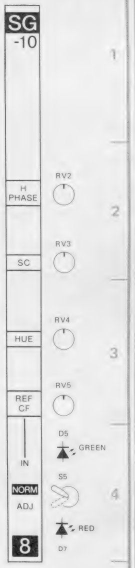
RB9, 10, 11

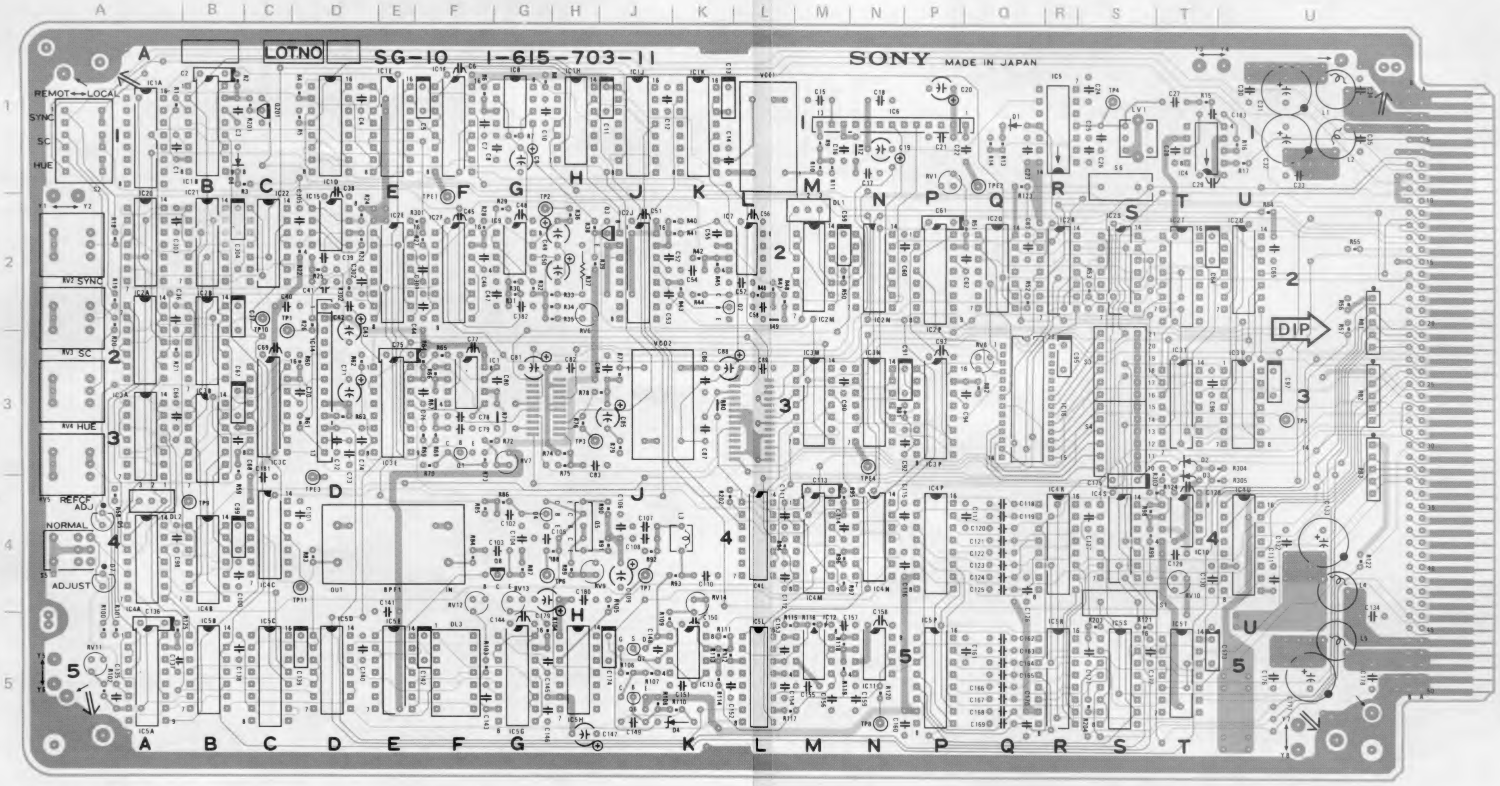



MY-21 BOARD
16-Line Memory
Dropout Compensator
Sequencer
ECL TO TTL
MAIN MEMORY
DO MEMORY
MAIN MEMORY CONTROL
LINE ADDRESS CONTROL
MEMORY WRITE PULSE GEN.
1H MEMORY ADDRESS GEN.
Y/C SEP
DECODER
Y MEMORY
Y FILTER 1
Y FILTER 2
C MEMORY
BLKG DATA GEN.
ENCODER
TTL TO ECL
SYSTEM CONTROLLER
DO PULSE STRETCHER
SYSTEM CNTROLLER
Y ADD
CHROMA
MY-21 BOARD
BOARD NO.1-615-702-13&UP
BKH-2150(J/U/C):# 11201~

SG-10 BOARD (1-615-703-11)

Component Side

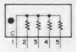




1-615-703-11 COMPONENT SIDE

1-615-703-11 SOLDER SIDE

RB1, 2, 3



SG-10 (1-615-703-11)

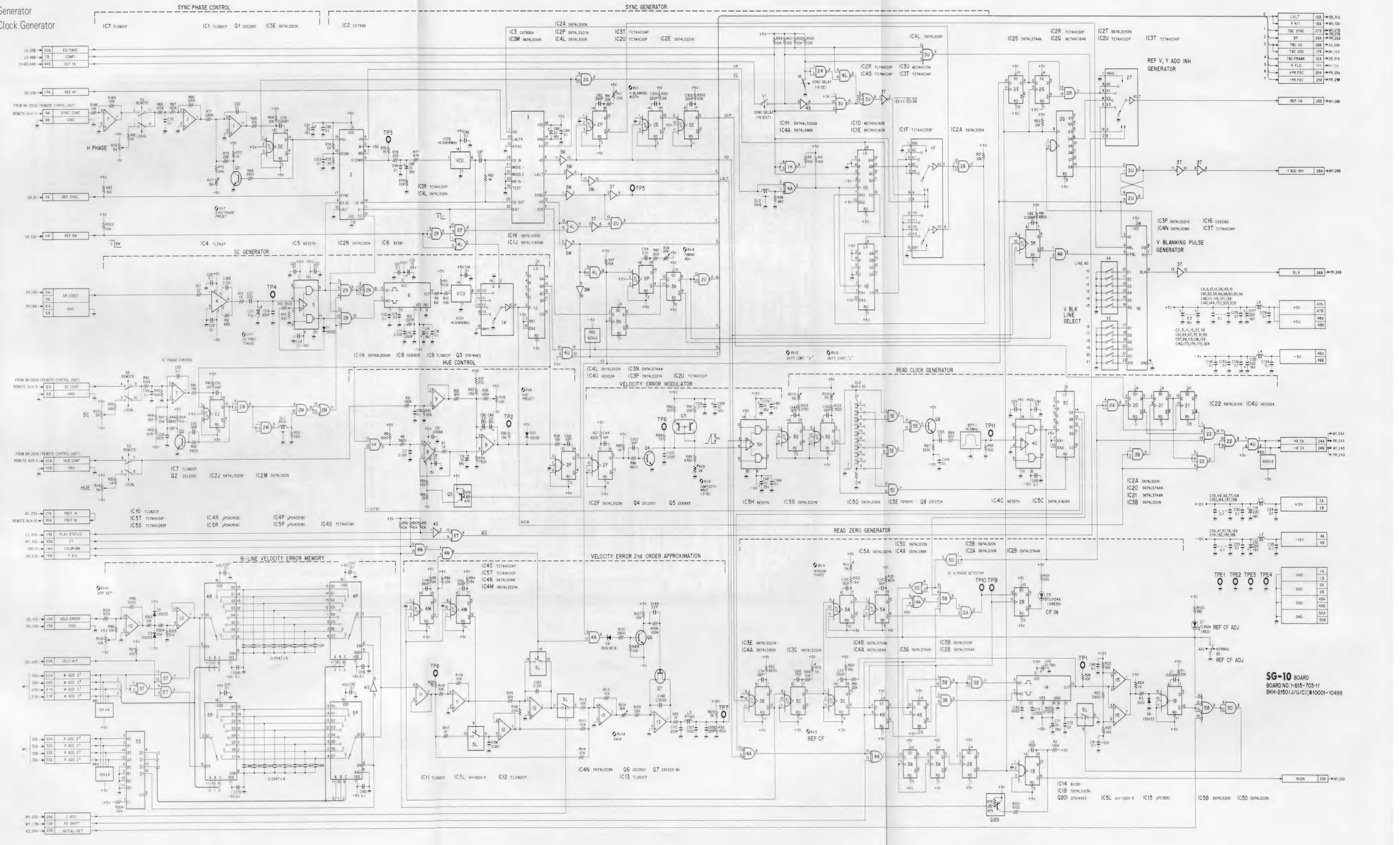
BKH-2150(J,U/C)

BPF1	5E
D1	1Q
D2	3T
D3	3T
D4	5K
D5	4A
D6	1B
D7	4A
D101	2G
DL1	2M
DL2	4A
DL3	5F
IC1	3F
IC2	3G
IC3	3L
IC4	1T
IC5	1R
IC6	1N
IC7	2L
IC8	1G
IC9	2G
IC10	4T
IC11	5N
IC12	5M
IC13	5K
IC14	3D
IC15	2D
IC16	3Q
IC20	2A
IC21	2B
IC22	2C
IC1B	
IC1D	
IC1E	
IC1F	
IC1H	
IC1J	
IC1K	
IC2A	
IC2B	
IC2E	
IC2F	
IC2J	
IC2M	
IC2N	
IC2P	
IC2Q	
IC2R	
IC2S	
IC2T	
IC2U	
IC3A	
IC3B	
IC3C	
IC3E	
IC3M	
IC3N	
IC3P	
IC3T	
IC3U	
IC4A	
IC4B	
IC4C	
IC4L	
IC4M	
IC4N	
IC4P	
IC4R	
IC4S	
IC4U	

IC5A	
IC5B	
IC5C	
IC5D	
IC5E	
IC5G	
IC5H	
IC5L	
IC5P	
IC5R	
IC5S	
IC5T	
LV1	1S
Q1	3F
Q2	2K
Q3	2J
Q4	4G
Q5	4H
Q6	5J
Q7	5J
Q8	4G
Q201	1C
RB1	2U
RB2	3U
RB3	3U
RV1	1P
RV2	2A
RV3	2A
RV4	3A
RV5	3A
RV6	2H
RV7	3G
RV8	3Q
RV9	4H
RV10	4T
RV11	5A
RV12	4F
RV13	4G
RV14	4K
S1	4S
S2	1A
S3	3S
S4	3S
S5	4A
S6	1S
TP1	2C
TP2	2G
TP3	3H
TP4	1S
TP5	3U
TP6	4G
TP7	4J
TP8	5N
TP9	4B
TP10	2C
TP11	4D
TPE1	2F
TPE2	1Q
TPE3	3D
TPE4	3N
VCO1	1L
VCO2	3J

SG-10 BOARD

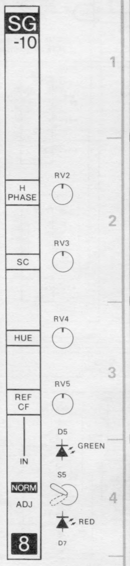
Sync Generator
Read Clock Generator

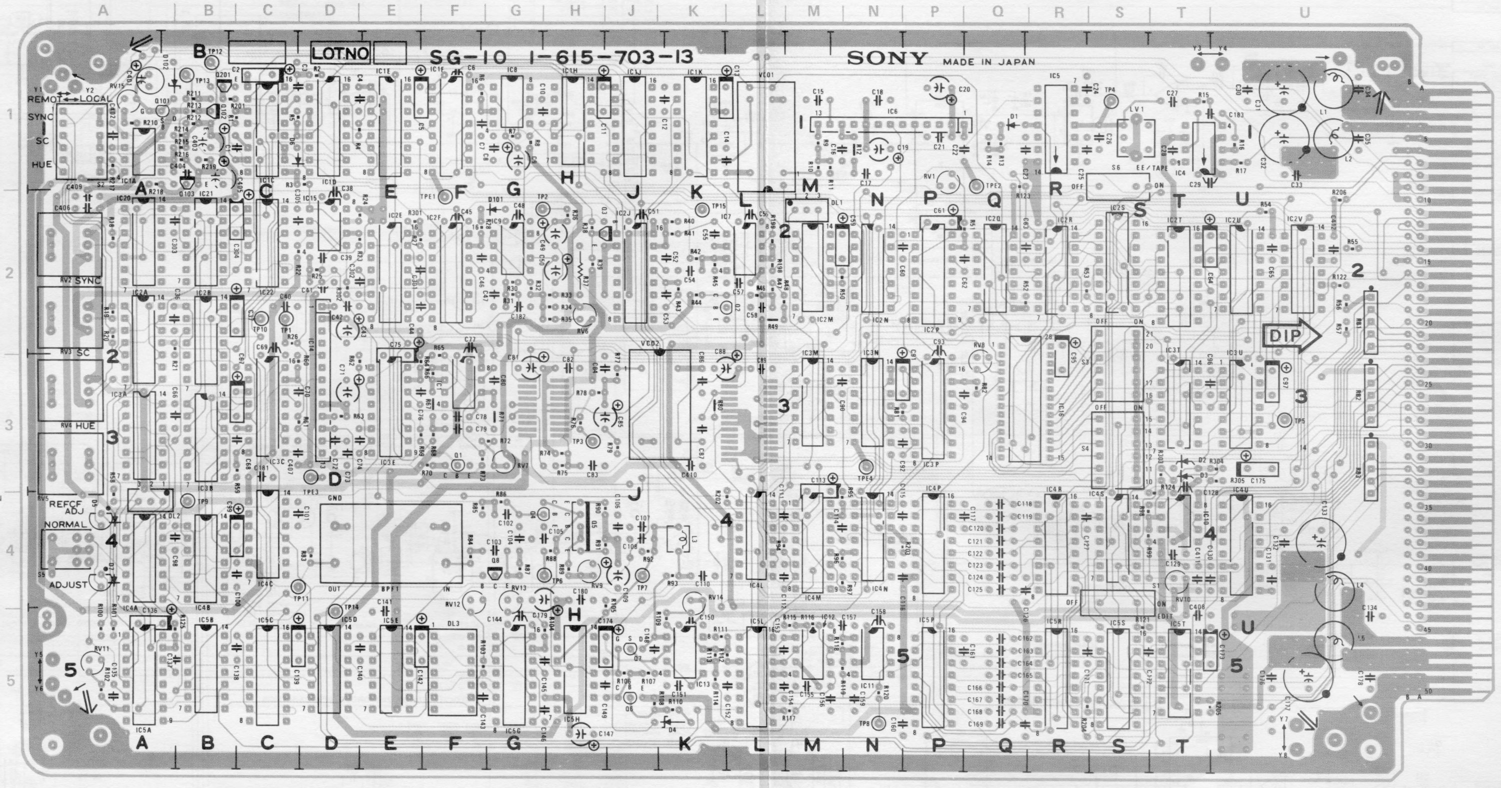


SG-10 BOARD
BOARD NO. 1-615-703-11
BKH-2150(J/U/C);#10001-10499

SG-10 BOARD (1-615-703-13)

Component Side

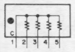




■ 1-615-703-13 COMPONENT SIDE

■ 1-615-703-13 SOLDER SIDE

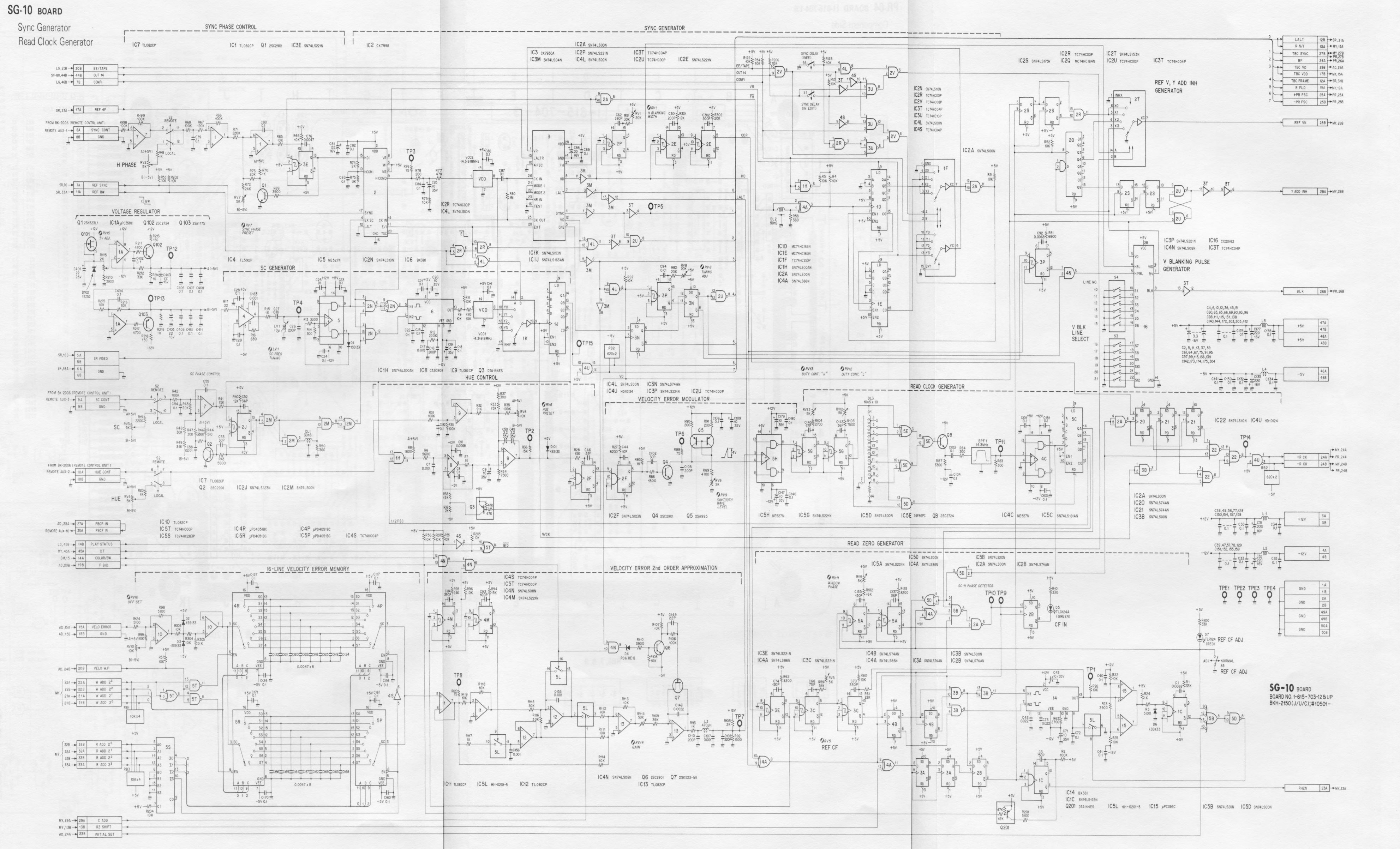
RB1, 2, 3



SG-10 (1-615-703-12 & UP)

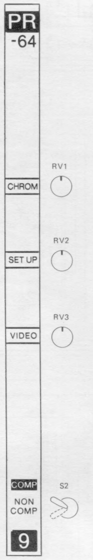
BKH-2150(J,U/C)

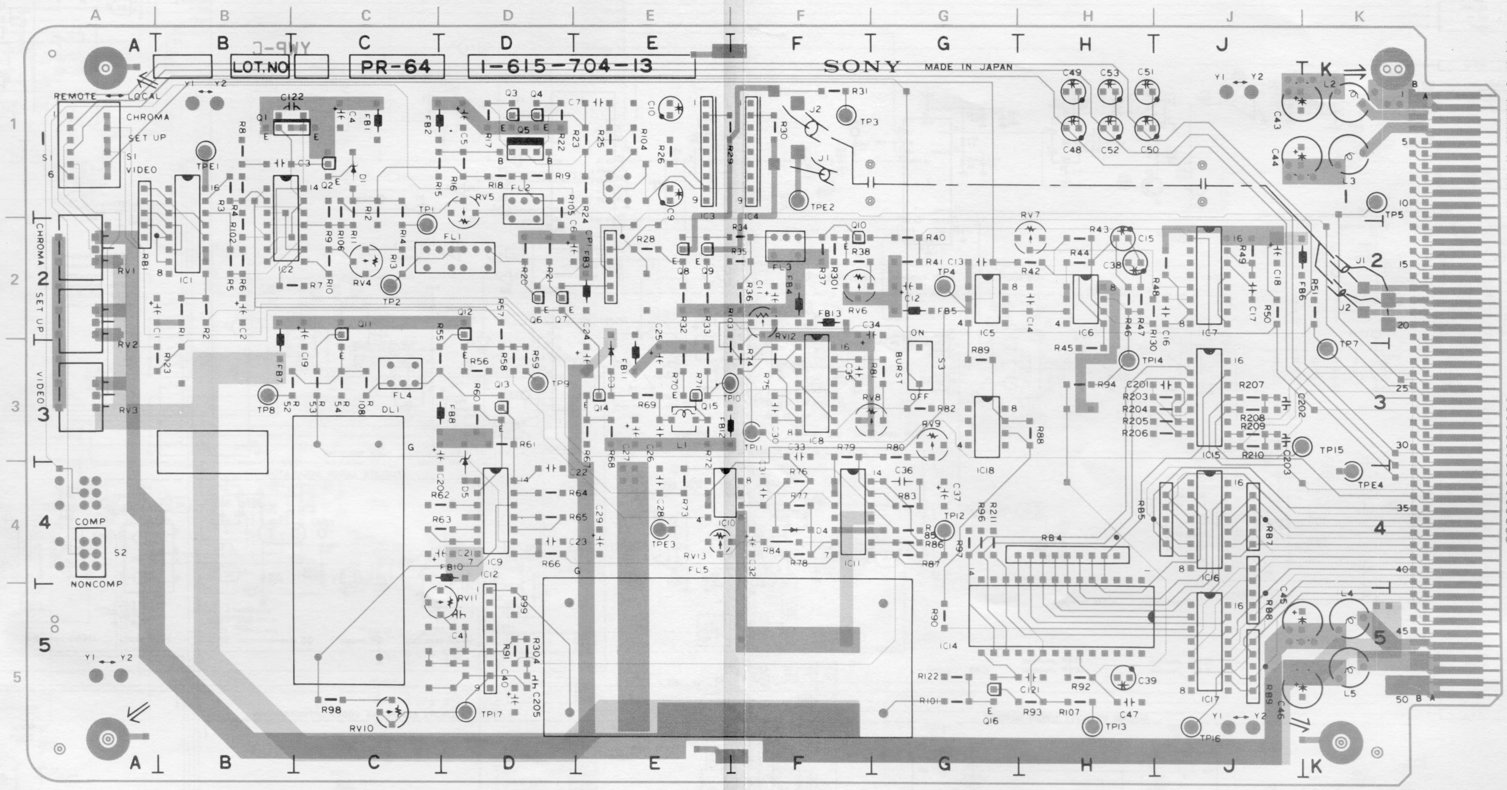
BPF1	4E	IC5A	
		IC5B	
D1	1Q	IC5C	
D2	3T	IC5D	
D3	3T	IC5E	
D4	5K	IC5G	
D5	4A	IC5H	
D6	1B	IC5L	
D7	4A	IC5P	
D101	2G	IC5R	
D102	1B	IC5S	
		IC5T	
DL1	2M		
DL2	4A	LV1	1S
DL3	5F		
		Q1	3F
IC1	3F	Q2	2K
IC2	3G	Q3	2J
IC3	3L	Q4	4G
IC4	1T	Q5	4H
IC5	1R	Q6	5J
IC6	1N	Q7	5J
IC7	2L	Q8	4G
IC8	1G	Q101	1B
IC9	2G	Q102	1B
IC10	4T	Q103	1B
IC11	5N	Q201	1C
IC12	5M		
IC13	5K	RB1	2U
IC14	3D	RB2	3U
IC15	2D	RB3	3U
IC16	3Q		
IC20	2A	RV1	1P
IC21	2B	RV2	2A
IC22	2C	RV3	2A
		RV4	3A
IC1A		RV5	3A
IC1C		RV6	2H
IC1D		RV7	3G
IC1E		RV8	3Q
IC1F		RV9	4H
IC1H		RV10	4T
IC1J		RV11	5A
IC1K		RV12	4F
IC2A		RV13	4G
IC2B		RV14	4K
IC2E		RV15	1A
IC2F			
IC2J		S1	4S
IC2M		S2	1A
IC2N		S3	3S
IC2P		S4	3S
IC2Q		S5	4A
IC2R		S6	1S
IC2S			
IC2T		TP1	2C
IC2U		TP2	2G
IC3A		TP3	3H
IC3B		TP4	1S
IC3C		TP5	3U
IC3E		TP6	4G
IC3M		TP7	4J
IC3N		TP8	5N
IC3P		TP9	4B
IC3T		TP10	2C
IC3U		TP11	4D
IC4A		TP12	1B
IC4B		TP13	1B
IC4C		TP14	5D
IC4L		TP15	2K
IC4M			
IC4N		TPE1	2F
IC4P		TPE2	1Q
IC4R		TPE3	3D
IC4S		TPE4	3N
IC4U			
		VCO1	1L
		VCO2	3J


SG-10 BOARD
Sync Generator
Read Clock Generator
SYNC PHASE CONTROL
SYNC GENERATOR
VOLTAGE REGULATOR
SC GENERATOR
HUE CONTROL
VELOCITY ERROR MODULATOR
READ CLOCK GENERATOR
READ ZERO GENERATOR
16-LINE VELOCITY ERROR MEMORY
VELOCITY ERROR 2nd ORDER APPROXIMATION
REF V, Y ADD INH GENERATOR
V BLANKING PULSE GENERATOR
H PHASE
SC
HUE
REF CF ADJ
SG-10 BOARD
BOARD NO. 1-615-703-12 & UP
BKH-2150(J/U/C); #10501~

PR-64 BOARD (1-615-704-13)

Component Side

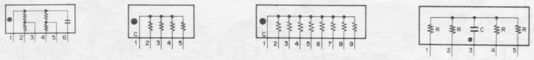




■ 1-615-704-13 COMPONENT SIDE

■ 1-615-704-13 SOLDER SIDE

CP1 RB1 RB4 RB5, 7, 8, 9



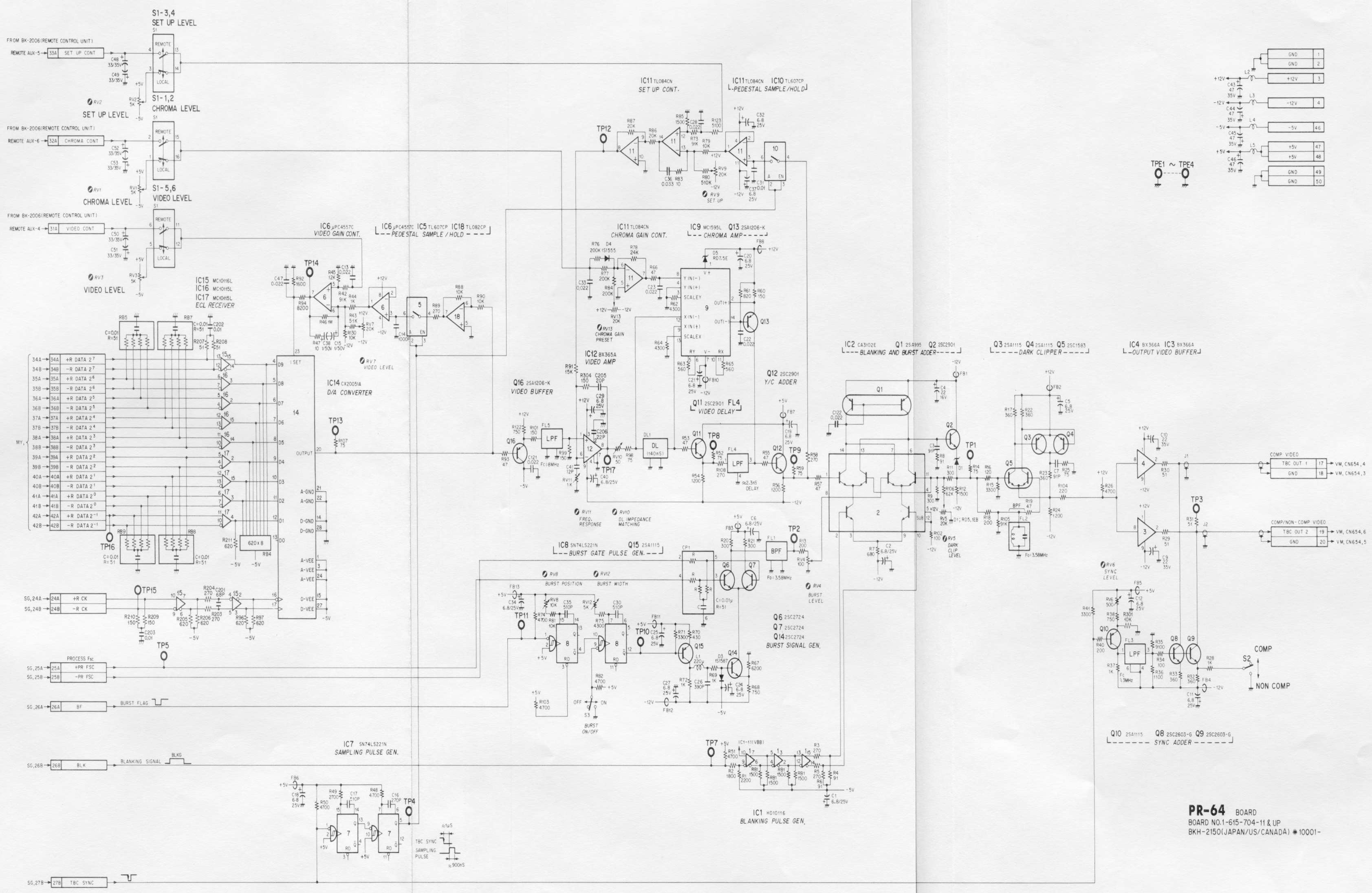
PR-64 (1-615-704-13 & UP)

BKH-2150(J,U/C)

CP1	2E
D1	1C
D3	3E
D4	4F
D5	4D
D6	3B
DL1	4C
FL1	2D
FL2	1D
FL3	2F
FL4	3C
FL5	5E
IC1	2B
IC2	2B
IC3	1E
IC4	1F
IC5	2G
IC6	2H
IC7	2J
IC8	3F
IC9	4D
IC10	4E
IC11	4F
IC12	5D
IC14	5H
IC15	3J
IC16	4J
IC17	5J
IC18	3G
Q1	1C
Q2	1C
Q3	1D
Q4	1D
Q5	1D
Q6	2D
Q7	2D
Q8	2E
Q9	2E
Q10	2F
Q11	2C
Q12	2D
Q13	3D
Q14	3E
Q15	3E
Q16	5G

RB1	2A
RB4	4H
RB5	4J
RB7	4J
RB8	5J
RB9	5J
RV1	2A
RV2	2A
RV3	3A
RV4	2C
RV5	1D
RV6	2F
RV7	2H
RV8	3F
RV9	3G
RV10	5C
RV11	5D
RV12	2F
RV13	4E
S1	1A
S2	4A
S3	3G
TP1	2C
TP2	2C
TP3	1F
TP4	2G
TP5	1K
TP7	3K
TP8	3B
TP9	3D
TP10	3E
TP11	3F
TP12	4G
TP13	5H
TP14	3H
TP15	3J
TP16	5J
TP17	5D
TPE1	1B
TPE2	1F
TPE3	4E
TPE4	4K

PR-64 BOARD
D/A Converter
Processor



PR-64 BOARD
BOARD NO.1-615-704-11 & UP
BKH-2150(JAPAN/US/CANADA) ※10001-